

REMARKS/ARGUMENTS

1. In the above referenced Office Action, the Examiner rejected claims 1, 3-8, and 10 - 15 under 35 USC § 102 (b) as being anticipated by Apel (U.S. Patent No. 6,407,647) and claims 2 and 9 under 35 USC § 103 (a) as being unpatentable over Apel (U.S. Patent No. 6,407,647) in view of Morikawa (U.S. Patent No. 6,285,273). These rejections have been traversed and, as such, the applicant respectfully requests reconsideration of the allowability of claims 1 - 15.

2. Claims 1, 3-8, and 10 - 15 have been rejected under 35 USC § 102 (b). The basis for rejection is the same as in the preceding office action of 12/24/03. In the present office action, the Examiner stated in the response to the arguments, that even though Apel does not mention the intended purpose of the geometry winding corners, but meets all of the positive recited structure of an inductor which would provide the same function as the claimed structure. The applicant respectfully disagrees.

As the applicant teaches in the specification on page 5, lines 21 - 24, that the inductance value of an on-chip inductor is dependent on the length of the interior edge of the metalization (i.e., the interior edge of winding 12) where the current tends to concentrate. The applicant further teaches in the specification on page 6, lines 5 - 12, that to improve the quality factor of rectangular on-chip inductors and/or square on-chip inductors, current turbulence within the metal track needs to be reduced. Such turbulence consumes power as resistive loss, but does

not contribute to the inductive value. Thus, by eliminating, or reducing current turbulence, by cutting the corners of winding 12, the resistive loss due to turbulence is reduced and the inductance value is not affected.

Claim 1 has been amended to include that the geometric shaping of the corners of the inductor reduce the impedance of the on-chip inductor at an operating frequency with negligible effects on inductance of the on-chip inductor. As the Examiner has admitted, Apel does not mention the intended purpose of the geometry winding corners. As the passage above indicates, cutting of the corners has to be done in a particular manner to reduce the impedance without affecting the inductance. The fact that Apel shows angled corners cannot be broadly interpreted to mean that such angled corners are done in a manner to reduce impedance and not affect the inductance as is presently claimed. Thus, the applicant believes that claim 1 overcomes the present rejection and believes that such reasoning is applicable in distinguishing claims 3-8, and 10 - 15 over the same rejection.

3. Claims 2 and 9 have been rejected under 35 USC § 103 (a). The basis for rejection is the same as in the preceding office action of 12/24/03. In the present office action, the Examiner stated in the response to the arguments, that Morikawa does not mention the intended purpose of the geometry winding corners, but meets all of the positive recited structure of an inductor which would provide the same function as the claimed structure. The applicant respectfully disagrees.

The applicant reasserts the arguments presented above and, as such, believes that claims 2 and 9 overcome the present rejection.

For the foregoing reasons, the applicant believes that claims 1 - 15 are in condition for allowance and respectfully request that they be passed to allowance.

The Examiner is invited to contact the undersigned by telephone or facsimile if the Examiner believes that such a communication would advance the prosecution of the present invention.

RESPECTFULLY SUBMITTED,

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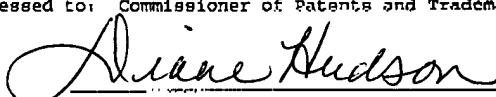
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